



# Introduction

## The Dilemma

Since 1981, the state's population has grown 37 percent; meanwhile, the number of vehicle-miles traveled (VMT) in North Carolina has quadrupled. The result: a greater number of people driving a proportionately larger number of miles on a transportation system that lacks adequate funding for maintenance and expansion. Traffic volumes and congestion have increased; while at the same time mobility and air quality have worsened. These and other challenges related to the disparity between the growth in travel demand and transportation funding have strained the ability of the North Carolina Department of Transportation (NCDOT) to maintain and develop an adequate transportation system.

Further exacerbating the chasm between the increase in travel demand and the ability to finance improvements to address these needs is the increasing reliance on arterials to carry a disproportionate share of the overall travel demand. As in many communities across North Carolina, land use patterns in Rocky Mount have evolved to include more suburban development and the further isolation of land uses. As such, facilities intended to serve longer distance travel are used to accommodate many shorter distance trips. In addition to this trend, the pervasiveness of cul-de-sac developments and the resulting lack of street connectivity between land uses, or even neighboring subdivisions, have resulted in a transportation system that primarily relies on the arterial portion of the network versus a well-integrated system of arterials, collectors, and local streets. With this in mind, the Rocky Mount Metropolitan Planning Organization (MPO) embarked on the development of a Collector Street Plan, with the goal of preserving, planning, developing, and enhancing critical transportation connections across the local transportation network.

## Plan Purpose

The purpose of the *Rocky Mount Collector Street Plan (CSP)* is to inventory the existing collector street network and develop standards and policies that will promote future connectivity and accommodation for automobiles, transit, pedestrians, and bicycles as collector streets are constructed. Although the plan included the development of a functional classification system to categorize existing and future streets, it is **not** the intent of the plan to designate any existing streets for reconstruction or to be retro-fitted to meet any existing or proposed design standards for collector streets. The plan study area is shown in **Figure 1.1**.



*Historic Main Street—Rocky Mount*



*East Grand Avenue—Where is the sidewalk?*

*photo by: Reuben Blackwell*



The goal of the Rocky Mount Collector Street Plan is to augment and strengthen *Together Tomorrow-Tier 1 Smart Growth Comprehensive Plan for the City of Rocky Mount, The Rocky Mount Urban Area Transportation Plan, and The Rocky Mount Thoroughfare Plan* in the planning and implementation of a transportation system that will address the long term needs of the City. As with the Comprehensive Plan the CSP seeks to reinforce the goals of improved traffic flow, expanded public transportation services, enhanced maintenance and appearance of roadways, increased travel ways for pedestrians and bicyclists, and increased traffic safety.

In addition to the enhancements highlighted above, an effective interconnected collector street network can also provide numerous other benefits including:

- Reduced reliance on major arterials (thoroughfares) for short trips
- Reduced travel times without travel speed increases (improved connectivity)
- Compatible connections between complementary land uses
- Encouragement for mixed use developments (opportunity to reduce automobile dependence)
- More direct emergency response access
- Improvements to the non-vehicular transportation system (pedestrian and bicycle system improvements)

While the CSP includes a map which depicts existing and future streets by category (Arterial, Collector, or Local), it is important to note that the map is more qualitative than quantitative. That is to say that the maps are not precise and **do not** reflect the actual location or alignment of a proposed facility. Such a decision could only be made after careful consideration and evaluation of a given facility and the specific constraints related to its construction. The map associated with the CSP is intended to identify the general location of future collector streets and the desired level of connectivity. It is also important to note that the proposed collector streets assume that development exists (or will exist) at some future date at a scale to warrant the construction of a collector street. To this end, the plan would not generally support the construction of collector streets in the absence of development.

**Transportation Goal:**

*Develop a transportation system that improves the vehicular traffic flow; expands public transportation services; enhances maintenance and appearance of roadways; increases travelways for pedestrians and bicyclists; and promotes traffic safety.*

*-Rocky Mount  
Comprehensive Plan*



*Tarboro Street – a collector street  
photo by: Jonathan Boone*



## **Insert Figure 1.1-Study Area**



## Public Involvement

A critical component of a successful collector street plan is engaging the public that lives with the current system. These are the people who understand the pieces that work as well as the shortcomings of the existing network. In order to engage the citizens, work sessions with the general public, the steering committee (SC), and the City of Rocky Mount staff were held regularly throughout the study. These sessions were used to help guide and inform study team members. Topics of discussion at work sessions included:

- Goals and objectives
- Planning issues identification
- Evaluation of the existing street network
- Community priorities
- Traffic calming
- Street recommendations
- Costs and funding

Meetings were held with the steering committee (SC) throughout the study and addressed a variety of topics and issues. The first two meetings with the SC were focused on goal setting and developing objectives for the outcome of the study (identified in the next section of this chapter).

After the existing street network was evaluated, another session with the steering committee members focused on helping the group better understand street types (arterial, collector and local) and function. For this process a short informational handout and quiz were created and are included in **Appendix B**.

Members of the steering committee also were asked to identify items that were considered “high priority” and those that would be considered “low priority” for transportation-related improvements. The following priorities reflect committee member ranking:

### High Priority

1. Sidewalks
2. Curb and gutter
3. Striping, signing, and lighting
4. Gateways and landscaping
5. Medians
6. Roundabouts

### Low Priority

7. Multi-use paths
8. Three-lane cross sections
9. Bus shelters



*Belmont Farms Parkway—a quiet residential street*  
photo by: Jonathan Boone



*Public workshop*



10. Two-lane cross sections
11. On-street parking, bike lanes, and shoulder sections

Traffic calming also was identified as a priority for streets where traffic was traveling above the posted speed and where cut-through traffic was viewed as problematic.

Discussions with the steering committee resulted in the development of three types of collector streets: residential, commercial, and industrial. Included with these three types of streets were several intersection concepts that would handle different levels of traffic—with left-turn lanes, without left-turn lanes, with bulb-outs, with small curb radii, and with large curb radii.

Both funding and estimated costs were discussed with committee members. Also, the question of “who pays” was discussed, ending with resolution that generally the city and developers are responsible for not only funding the construction of collector streets, but also maintaining the streets (as appropriate). Estimated unit costs (2003 dollars) prepared for different types of collector streets are the following:

- Existing residential (37' B-B)=\$276/linear foot
- Proposed residential (30' B-B)=\$306/linear foot (approximately 11% higher than an existing residential street)
- Commercial (40' B-B)=\$380/linear foot (38% higher than an existing residential street)
- Industrial (40' B-B)=\$380/linear foot (38% higher than an existing residential street)

In addition to regular meetings with the steering committee, workshops were coordinated with the general public to garner further input. Topics discussed with the steering committee also were introduced during the public workshops, providing team members with additional input regarding key issues.

## Goals and Objectives

One of the most important outcomes of the public involvement part of this plan was the identification of goals and objectives. Developed to guide the project team as it completed the collector street plan, these goals and objectives reflect the collective input and vision of the project steering committee. The objectives below also incorporate ideals presented in *Together Tomorrow*, the Comprehensive Plan for Rocky Mount.



*Curb and gutter, a planted verge, and a sidewalk*  
photo by: Bob League



*Sidewalks, marked crosswalks, and streetlights*  
photo by: Reuben Blackwell





**Goal 1**—Develop a comprehensive collector street system that sustains a high quality of life through a well-designed and maintained interconnected system of streets.

- *Objective 1.1*—Define a functional classification system that is appropriate for the Rocky Mount MPO planning area.
- *Objective 1.2*—Adopt design guidelines, standards, and policies for collector streets that are consistent with their functional environment.
- *Objective 1.3*—Define operational characteristics for proposed collector streets that address posted speed, lane width, intersection spacing, access characteristics, and other appropriate parameters.
- *Objective 1.4*—Prepare a plan for the horizon year 2030 for collector streets that will improve connections between local streets and arterials.
- *Objective 1.5*—Plan future collector street connections that support the arterial system and increase access opportunities for emergency vehicles through an interconnected system of streets.

**Goal 2**—Develop a collector street system that improves vehicular traffic flow and promotes travel safety.

- *Objective 2.1*—Develop general guidelines for traffic calming use and identify benefits and applications to reduce travel times without increasing travel speeds on collector streets.
- *Objective 2.2*—Develop spacing standards and access management strategies that minimize driver confusion and conflicts between vehicles and pedestrians.

**Goal 3**—Enhance pedestrian and bicycle amenities and promote public transportation services.

- *Objective 3.1*—Develop proposed cross sections for collector streets that describe each type of collector (residential, commercial, and industrial) in terms of accommodation for pedestrians, bicycles, transit, automobiles, and other users. Properly designed collector streets foster alternate modes of transportation and should serve as the primary means of transporting bicyclists, joggers, pedestrians, and motorized wheelchairs within and through residential areas.
- *Objective 3.2*—Incorporate existing bicycle, pedestrian, open space, and transit plans identified in *Together*



*Public workshop*



*Tomorrow*, the Comprehensive Plan for Rocky Mount, including provisions for future connections and service to future activity destinations.

**Goal 4**—Foster public consensus through a well-defined public outreach program that considers the diversity of interests and needs within the community.

- *Objective 4.1*—Identify and carry out a public involvement plan that encourages input and seeks to develop consensus on the design, function, and implementation of collector streets.

This document was created to reflect these goals and objectives, and includes information regarding existing conditions, recommendations, and an implementation plan. It should help guide the planning, construction, and maintenance of a collector street system in Rocky Mount.